CBRFC Forecast Update:
Upper Green and Yampa

April 18, 2012
Ashley Nielson
NWS Colorado Basin River Forecast Center
Outline

1. Current Conditions
   • Precipitation/Temperature/Snow
   • Weather Forecasts

2. Water Supply

3. Yampa Peak
15,000 Records Broken!
April Precipitation....so far

Wyoming

Colorado
Snow

March 6, 2012

April 17, 2012

UPPER GREEN: SNOW

4/17 - 68%

To Date: 68% (9.2 / 13.5)
Seasonal: 65% (9.2 / 14.2)
Accumulation rate 0.0 in/day averaged over last 3 days.

Colorado Basin River Forecast Center
Upper Green Group

Created 04/17, 16:41 UTC
NOAA/CBRFC, 2012

Average 1981-2010 - 2012 - 2011
To Date: 35% (7.1 / 20.5)
Seasonal: 33% (7.1 / 21.4)
Accumulation rate 0.1 in/day averaged over last 3 days.
Weather Forecast

- Series of weak troughs and shortwaves.
- Showers and cooler temperatures through Friday.
Weather Forecast

• Strong ridge of high pressure builds through the weekend into early next week.
• Above average temperatures through at least Tuesday...maybe longer
La Nina Update

FORECASTS: Upper Green

APRIL 16th Forecast: 785 KAF/80%
Peakflow Forecasts

**YAMPA - DEERLODGE PARK (ydlc2)**

Flow (cfs) for April-July, Forecast run 2012-04-17 14:00 GMT

*Plot Created April 17, 14:31 MDT by the Colorado Basin River Forecast Center (NWS/NOAA)*

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Forecast Peak (cfs)</th>
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<tbody>
<tr>
<td>90%</td>
<td>4,200</td>
</tr>
<tr>
<td>75%</td>
<td>5,000</td>
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<tr>
<td>50%</td>
<td>6,500</td>
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<tr>
<td>25%</td>
<td>8,500</td>
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<tr>
<td>10%</td>
<td>11,000</td>
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</tbody>
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Spring Weather Really Matters

• Runoff characteristics are largely determined by the day-to-day spring weather.
  – While large snow pack years increase chances for flooding, it is not an inevitability
  – Small snow pack years (like 2010) can flood with the right sequence of spring temperatures
Historical timing ranges from late April to June for observed peaks similar to forecasted peak.
Possible Deerlodge Peak Scenarios

Warm and cool periods...

Warm period rain enhanced...

More typical double peak...
GREEN - JENSEN, NR (jesu1)

Flow (cfs) for April-July, Forecast run 2012-04-17 14:00 GMT

*Assuming 4,600 cfs release from Flaming Gorge*
Questions/Comments?

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